FORMPTO-1390(Modified) U.S. PATENTAND TRADEMÁRIOFFICE; U.S. DEPARTMENTOF COMMERCE ATTORNEY SDOCKETNI IMPED

TRANSMITTAL FETTER TO THE TOTAL TOTA TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATIONNO. (If known, see 37 CFR 1.5)

10/527527

C	CONCERNING A SUBMISSION UNDER 35 U.S.C. 371							
NTE		TIONALAPPLICATIONNO. CT/CN2003/001092	INTERNATIONALFILINGDATE December 19, 2003	PRIORITYDATE CLAIMED				
TITI F	TLEOF INVENTION							
A ME	METHOD FOR SEPARATING, EXTRACTING AND PURIFYING POLY-B-HYDROXYALKANOATES (PHAS) DIRECTLY ROM BACTERIAL FERMENTATION BROTH							
APPL	PPLICANT(S)FOR DO/EO/US							
CHE	N, Xu	ejun						
Applio	canthe	erewithsubmits to the United State	es Designated/ElectedOffice (DO/EO/US)the fo	ollowingitems and other information:				
1.	Ø	This is a FIRST submission of ite	ms concerninga submissionunder 35 U.S.C.3	71.				
2.		This is a SECONDor SUBSEQU	JENTsubmissionof items concerninga submiss	sionunder 35 U.S.C. 371.				
3.		This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.						
4.		The US has been elected (Article	:31).					
5.	×	A copy of the International Applic	ationas filed (35 U.S.C. 371 (c)(2))					
		a. 🗵 is attachedhereto (requ	iredonly if not communicatedby the Internatio	nalBureau).				
		b.  has been communicate	edby the InternationalBureau.					
		c.  is not required, as the a	pplicationwas filed in the United States Receiving	ingOffice(RO/US).				
6.	X	An Englishlanguagetranslation	of the International Applicationas filed (35 U.S.C	C.371(c)(2)).				
		a. 🗵 is attachedhereto.						
		b.  has been previously sul	omittedunder 35 U.S.C. 154(d)(4).					
7.		Amendmentsto the claims of the	International Application under PCT Article 19 (	(35 U.S.C.371 (c)(3))				
		a.   are attachedhereto (red	quiredonly if not communicatedby the Internati	onalBureau).				
		b. $\square$ have been communica	tedby the InternationalBureau.					
		c. $\square$ have not been made; however, the time limit for making such amendments has NOT expired.						
		d. $\square$ have not been made an	d will not be made.					
8.		An Englishlanguage translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).						
9.	$\boxtimes$							
10.		An Englishlanguage translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).						
11.		A copy of the InternationalPrelim	ninaryExaminationReport(PCT/IPEA/409).					
12.	X	A copy of the InternationalSearc	hReport(PCT/ISA/210).					
It	ems 1	3 to 23 below concerndocumer	nt(s)or informationincluded:					
13.	$\boxtimes$	An InformationDisclosureState	mentunder 37 CFR 1.97 and 1.98.					
14.	$\boxtimes$	An assignmentdocumentfor reco	ording. A separatecover sheet in compliancew	rith 37 CFR 3.28 and 3.31 is included.				
15.	$\boxtimes$	A FIRST preliminary amendment.						
16.		A SECONDOR SUBSEQUENTOR	reliminaryamendment.					
17.	×	A substitutespecification.		}				
18.	X	A power of attorney and/or change of address letter.						
19.		A computer-readable form of the sequencelisting in accordance with PCT Rule 13/er.2 and 37 CFR 1.821 - 1.825.						
20.		A second copy of the published International Application under 35 U.S.C. 154(d)(4).						
21.								
22.	$\boxtimes$	ExpressMail Label No. EV	790916619US					

IAP12 Rec'd PCT/PTO 1 9 JUN 2006

PTO-1390(Rev. 07-2005)

Approvedfor use through 3/31/2007. OMB 0651-0021

U.S. Patentand TrademarkOffice; U.S. DEPARTMENTOF COMMERCE

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U.S. AP	PLICATIO	NO (if known, see	37 CFR 1.5)	INTERNATIONA	LAPPL	ICATIONNO	D.	ATTORNEY'SDOO	KETNUMBER	
	<u> 19</u> ,	<u> 15835</u>	8/	PCT/CN20	03/00	1092		133697-0	028	
23.	Otheritem	s or information:								
I I	English Translation of Amendments o Specification, Claims and Abstract Made Under PCT Article 34 Information Concerning Elected Office Notified of Their Election (Form PCT/IB/332) International Preliminary Report on Patenta bility Together with Notification of Transmission Thereof Copies of Prior Art References Cited in IDS									
The	following	fees have been s	submitted:					CALCULATIONS	PTOUSE	
24. 🛭	Basiona	tionalfee					\$300	\$ \$300.00		
If the wri	itten opinio dby IPEA	/USindicatesall o	A/USor the claims satisfy	internationalprelimina	ticle		eport \$0 \$200	\$ \$200.00		
All other situations								\$ \$400.00		
	TOTAL	OF 24, 25 and	26 =				-	\$ \$900.00		
Additionalfee for specificationand drawingsfiled in paper over 100 sheets (excluding sequencelisting in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  Total Sheets Extra Sheets Number of each additional 50 or fraction thereof (round up to a whole										
	- 100 =	0 /50=		0		× \$250	.00	\$ \$0.00		
Surchar	geof \$130 ionafter th	0.00 for furnishing ne date of comme	any of the seencement of the	earch fee, examinatio he nationalstage (37	nfee, CFR	or the oath 1.492(h)).	nor	\$		
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Indepen	dentclaim	ns 1	- 3=	0	х	\$200	.00	\$ \$0.00		
MULTIP	LEDEPE	NDENTCLAIMS	(if applicable	e) 🗆	+	\$360	.00	\$ \$0.00		
			тот	AL OF ABOVE CA	ALCI	JLATION	IS =	\$ \$900.00		
☐ App 1/2.	olicantclai	mssmall entity s	tatus. See 37	CFR 1.27. Fees abo	veare	reducedb	у	\$ \$0.00		
					S	UBTOTA	AL =	\$ \$900.00		
Process the earlie	ingfee of estclaime	\$130.00 for furnised priority date (37	shingthe Eng CFR 1.492	glish translationlater th (i)).	nan 30	) monthsfi	rom	\$ \$0.00		
				TOTAL N	ITA	ONAL F	EE =	\$ \$900.00		
	Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate coversheet (37 CFR 3.28, 3.31). \$40 per property +									
TOTAL FEES ENCLOSED =								\$ \$900.00		
								Amount to be	\$	
								Amount to be	\$	

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10/583587

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U.S. Patent and Trademark Office; U.S. DEPARTMENTOF COMMERCE

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a.		A check in the amount of \$	to cover the	above fee	es is enclose	d.	
b.	×	Please charge my Deposit Account No. A duplicate copy of this sheet is enclosed.	12-2136	in the am	nountof\$	\$900.00	to cover the above fees.
С.	×	The Commissioneris hereby authorized to c to Deposit Account No. 12-2136	hargeany addit . A duplicatect		•		creditany overpayment
d.		Fees are to be charged to a credit card. WA informations hould not be included on the			•	•	
		Where an appropriatetime limit under 37 e filed and granted to restore the Internation				ionto revive	(37 CFR 1.137(a) or (b))
SE	NDA	ALL CORRESPONDENCETO:			1/ho	lal )	Westerde
				/ -	SIGNATUR	RE	77
					Michael S	6. Gzybowski	i
					NAME		
					32,816		
				_	REGISTRA	ATIONNUMBE	ER .
					June 19, 2	2006	
					DATE		

## 10/583587 IAP12 Rec'd PCT/PTO 19 JUN 2006

ATTORNEY'S DOCKET NO.: 133697-0028

"EXPRESS MAIL" COVER LETTER U.S. PATENT APPLICATION

Date: June 19, 2006

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Re:

**APPLICANTS:** 

**Xuejun CHEN** 

TITLE OF INVENTION:

A METHOD FOR SEPARATING, EXTRACTING AND PURIFYING POLY-β-HYDROXYALKANOATES (PHAs) DIRECTLY FROM BACTERIAL FERMENTATION BROTH

Forwarded herewith is the above-identified application, consisting of the following:

**Express Mail Cover Letter** 

Certificate of Mailing by "Express Mail"

Transmittal Letter to the U.S. Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (2 pgs) - In Duplicate

PCT Publication of International Application No. PCT/CN2003/001092 Including Search Report (Publication No. PCTWO2005/059153 A1)

Translation of International Application No. PCT/CN2003/001092(Publication No. PCTWO2005/059153 A1) into English Including Abstract, Specification, and Claims (7 pgs)

English Translation of Amended Documents including Specification, Claims and Abstract Made Under PCT Article 34

Substitute Specification - Clean Copy (6 pgs)

Substitute Specification - Marked-Up Copy (7 pgs)

Preliminary Amendment (6 pgs)

PCT/USA National Declaration and Power of Attorney (2 pgs)

International Preliminary Report on Patentability, together with the Notification of Transmission

(form PCT/IPEA/416 and form PCT/IPEA/409) in Chinese (4 pgs)

Information Concerning Elected Offices Notified of Their Election (Form PCT/IB/332) (1 pg)

Assignment Recordation Cover with Assignment from the Inventors to TIANAN BIOLOGI MATERIAL CO., LTD, NINGBO

Information Disclosure Statement (with Form PTO-1449 and copies of 4 cited prior art references)

Fee Transmittal (1 pg)

Return Post Card

Respectfully submitted,

Michael S. Gzybows

Reg. No. 32,816

Attorney for Applicant

BUTZEL LONG 350 South Main Street Suite 300 Ann Arbor, MI 48104 734-995-3110 (ph)

"EXPRESS MAIL" Mailing No. EV 790916619 US

Date of Deposit:

June 19, 2006

I hereby certify that this paper is being deposited with

The United States Postal Service "EXPRESS MAIL

POST OFFICE TO ADDRESSEE" service under

37 CFR 1.10 on the date indicated above and is addressed to the Mail Stop PCT, Commissioner for Patents.

P.O. Box 1450, Alexandria, VA 22313-1450

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Michael S. Gzybowsk

CERTIFICATE OI Applicant(s): Xuejun		PRESS MAIL" (37 CFR 1.10)	10/58	\$35,87 37-0028					
Application No. Unknown	Filing Date June 19, 2006	Examiner Unknown	Customer No. 35684	Group Art Unit Unknown					
Invention: A METHO (PHAs) DI	OD FOR SEPARATING, I RECTLY FROM BACTE	EXTRACTING AND PURIFYING POERIAL FERMENTATION BROTH	DLY-β-HYDROX	YALKANOATES					
	I hereby certify that the following correspondence:  New National Phase Utility Patent Application Based on PCT/CN2003/001092 - See list of submitted documents								
	(Identify type of correspondence)								
•	· Mail	ostal Service "Express Mail Post Off Stop PCT to: Commissioner for Patents, P.C							
	Michael S. Gzybowski  (Typed or Printed Name of Person Mailing Correspondence)  Millum Day 2  (Signature of Person Mailing Correspondence)								
EV 790916619 US  ("Express Mail" Mailing Label Number)									

Note: Each paper must have its own certificate of mailing.

Express Mail Cover Letter; Transmittal Letter to the U.S. Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (2 pgs) - In Duplicate; PCT Publication of International Application No. PCT/CN2003/001092 Including Search; English Translation of International Application No. PCT/CN2003/001092 Including Abstract, Specification, and Claims (7 pgs); English Translation of Amended Documents including Specification, Claims and Abstract Made Under PCT Article 34; Substitute Specification - Clean Copy (6 pgs); Substitute Specification - Marked-Up Copy (7 pgs); Preliminary Amendment (6 pgs); PCT/USA National Declaration and Power of Attorney (2 pgs); International Preliminary Report on Patentability, together with the Notification of Transmission; Information Concerning Elected Offices Notified of Their Election (Form PCT/IB/332) (1 pg); Assignment Recordation Cover with Assignment from the Inventors to TIANAN BIOLOGI MATERIAL CO., LTD, NINGBO; Information Disclosure Statement (with Form PTO-1449 and copies of 4 cited prior art references); Fee Transmittal (1 pg); and Return Post Card

## Doc Code: Approved for use through 07/31/2006. OMB 0651-0032 Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	Complete if Known									
Fees pursuant to the Consolida	Application Number Unknow		own							
FEE TRA	Filing Date		June 19							
for F	First Named In	ventor	Xuejun CHEN							
Applicant claims small			2 1 27	Examiner Nam	ie	Unkno	Unknown			
Applicant daims small	enuty Status		1.21	Art Unit		Unkno	wn			
TOTAL AMOUNT OF P	AYMENT	(\$)	940.00	Attorney Docke	et No.	133697	-0028			
METHOD OF PAYMEN	<b>T</b> (check all	that apply)								
☐ Check ☐ Credit (	Card	Money Order	☐ Non	e Dothe	er (pleas	e identify):				
Deposit Depo	osit Account	Number:	12-2136	Deposi	t Accour	nt Name	:BUT	ZEL LONG		
For the above-identified of	deposit accour	nt, the Director is	s hereby aut	horized to: (check	all that ap	ply)				
Charge f	ee(s) indicate	d below		Char	ge fee(s)	indicated	below, except fo	or the filing fee		
		fee(s) or any un	derpayment	s of 🔀 Cred	lit any ove	erpaymen	ts			
fee(s) un WARNING: Information on ti information and authorizatio	der 37 CFR 1 his form may n on PTO-203	become public	. Credit ca	rd information sh	ould not	be includ	led on this forr	m. Provide credit card		
FEE CALCULATION (A	II the fees	below are	due upoi	n filing or may	v be su	biect to	a surchar	ge.)		
1. BASIC FILING, SEAR						,				
5	FILING F			CH FEES		EXAMIN	ATION FEES			
Application Type	E00 (\$)	Small Entity	Eac (\$)	Small Entity		ing (\$)	Small Entity	Fees Paid(\$)		
Application Type Utility	<u>Fee (\$)</u> 300	<u>Fee (\$)</u> 150	<u>Fee (\$)</u> 500	<u>Fee (\$)</u> 250	ī	ee (\$) 200	<u>Fee (\$)</u> 100	rees raiu(\$)		
l '	200	100	100	50		130	65			
Design	200	100	300	150		160	80			
Plant	300	150	500	250		600	300			
Reissue	200	100	0	250		0	0	*		
Provisional		100	U	U		U	U			
2. EXCESS CLAIM FEES	5						F (6)	Small Entity		
Fee Description Each claim over 20 (inclu	dina Raissu	ac)					<u>Fee (\$)</u> 50	<u>Fee (\$)</u> 25		
Each independent claim o		•	1				200	100		
Multiple dependent claims	•	ugc.ccucc	,				360	180		
, <b>, ,</b>							Multiple	Dependent Claims		
<u>Total Claims</u>	Extra Clain	<u>rs Fee (\$)</u>		Fee Paid (\$)			<u>Fee (\$)</u>	Fee Paid (\$)		
- 20 or HP =				=\$0.00						
HP = highest number of total of Indep. Claims	laims paid for Extra Clain			Foo Poid (\$)						
- 3 or HP =			200.00	<u>Fee Paid (\$)</u> =\$0.00_						
HP = highest number of independent claims paid for, if greater than 3.  3. APPLICATION SIZE FEE										
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listing under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof.										
See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										
Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)  - 100 = 0 / 50 0 (round up to a whole x \$250.00 = \$0.00										
4. OTHER FEE(S)  Fee Paid (\$)										
, ,	Non-English specification, \$130 fee (no small entity discount)									
Other (e.g., late filing surc	harge): Bas	ic National Ph	ase Filing	Fee and Recorda	tion Fee	:		\$940.00		
SUBMITTED BY	200	- A2 - A3	/							
Signature	11.ha	U) like	2	Registration No. (Attorney/Agent)	32,	816	Telephone	734-995-3110		
Name (Print/Type)		Micha	el S. Gzybe	owski			Date	June 19, 2006		

This collection of information is required by 37 CFR 1/36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.